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## **CONCLUSION**

## CONCLUSION

### **Background**

Family is the smallest and most important unit of the society. Home is the most intimate place of living of this unit and the most important segment of the entire built environment. It is the man's little corner of the universe which is the point of reference of all his activities. As such a home is one of the fundamental needs and rights of any person and any family. Homes contain the major share of man's entire built environment.

Due to many reasons stemming from socio-economic disparities etc., housing has become major issue. Concurrently, solutions have come in many guises, and suburban mass housing is one such solution set out to house the middle income category. The given solution, which is a set of tailor made type houses has failed to fulfill the diverse needs and aspirations of their occupants and the houses have been changed to suit the requirements of their users.



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Specially in this situation, where mass housing is for housing the middle income category, there are some important aspects to be taken into consideration. The middle income people who are very image conscious are different from the lower and upper income people. Their attitudes and values are different to those of the upper and lower income category. Their values and aspirations are much more diverse in nature as they are engaged in constant economic and social upward mobility. Therefore the built forms which they come into contact with, will also get changed accordingly. The house as the most personal and intimate place, will get shaped, moulded and changed to a greater degree accordingly, to suit such diverse characteristics of their users. This is a continuous and an ongoing process.

Therefore specially the middle income house should be a place which enables the aspirations and needs of their users to realized.

But the given designs are an answers to the spatial requirements of "model" users. The homogenous nature of the people has not been taken into consideration. These given typified solutions are only answers to imaginary model users where their requirements are considered to be similar to each other. Therefore when designing such mass housing schemes one common phenomenon has totally been forgotten. That is the diversive nature of the user.

It is true enough that it is far too complex to set up a neat set of human needs that could be catered in house design. It is impossible to satisfy every aspect of all the individuals where their requirements are different to each other.

But the provision of mere shelters is not a justification for that situation.

The middle income people, due to many reasons may be compelled to go for a model house in a mass housing situation. At first the mere shelter need and affordability may drive him to do so. But, along with the time, needs other than shelter may make him to change the built environment around him to give opportunity for them.



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That phenomenon has to be clearly understood. The professionals, who are responsible should understand this clearly and they must contrive to give people what they will enjoy, not what the professionals wish them to enjoy.

Therefore the designed house should be a place which manifests of all the values and prevailing needs which have been commonly found in a specific society.

The prevailing values and needs of the society may be economic, cultural, aesthetic, social, technological and environmental but all the values needs are combined, and the hierarchy of them depends on the emphasis that the society gives to enjoy them.

Economic aspect in the dwelling situation is such a pressing need of the day which should be taken into serious consideration. It is a prevailing and widespread requirement of the present day dwellings.

In the case study an attempt has been made to reveal the prevailing situation and the tendency for such home-based commercial ventures in the dwelling units. The survey revealed that the "house" is not for only the conventional dwelling purposes any more. The provision for earning a livelihood in the future house designs is seen as an added criteria for the design. If not so, driven by the pressing needs, people may continue to make unsuitable changes in their houses making the "living" spaces unsuitable for the main purpose "living".

Therefore the professional architect, who is specialised in the field should come for guidance. The typical or tailor made model options have to be done away with. Instead, the mistakes, the problematic chaotic situations and spatial conflicts which have resulted due to the imposed solutions should be studied.

But, first and foremost the root cause for the situation which has been revealed in the case study should be understood.

Great variety of associated factors ranging from the very architecture itself to social, cultural, political may be responsible for that situation. Therefore the imposed solutions which are designed by the professionals in the field shows that they are not quite matching with the current socio cultural and economic trends which act as a determining factors of architecture.

What is felt, needed first and foremost is to strengthen the professional education to enlighten them on these lines ie, to strengthen their education.

The architects and the professionals in the fields need fresh thinking and thereby adapt new approaches to design specially the mass housing situations.

For that they need to recognise the user category-the people in their due place. They "the professionals", instead of playing the role of sole determinators need to extend an "enabling" hand to the people in order to "finish or complete their places of living".

Perhaps the architect should give a flexible design, allowing the finishing touch to be done by the occupants.

Other than that the choice of the dwelling unit according to the needs and requirements of the users should be manifested in the house to the maximum extent.

Without just offering tailor made few options, a great variety of options can be forwarded to suit the different personalities.

Finally it should be emphasised that the housing design be done in such a way that it gain the potential to be changed with time and the everchanging requirements of the users.

To come-out with such solutions in mass housing, the following aspects too felt needed due thought.

1. Flexibility in design
2. Unfinished designs/community architecture
3. Professional training/new education/new thinking
4. Reduction in regulatory hurdles
5. Further studies

1. Flexibility in design

From the studies, in the mass housing schemes, and from this study itself it has been found that the rigidity in the plan form is the major design constraint. This rigidity reduces the ways and means of possible changes in the original design.

That may give rise to in the dwellings unorganized spaces and unresolved spatial conflicts.

Therefore the flexibility may be the main solution for these problems. The occupants should be facilitated to arrange their internal spaces according to their needs and requirements.

The basic structure of the house can be provided where the occupants can arrange the internal spaces accordingly.

As one such design solution, the idea which has been forwarded by Mendis (1995) in his comprehensive design project for M.Sc. (Arch.) can be considered, where his major intention was to envisage the possibilities of flexibility in design in mass housing situations with a view to make maximum allowance for personal preferences and needs.

The new philosophy and design methodology can be summarised as follows :

"The design, adopting the concept of individual plots of land and the individual housing units built there on, has evolved a flexible spatial bay, giving each a unit value. There are a number of options (45-90 sq.m) in purchasing these have as desired by each family to create one's own place of living. Each spatial entity grows on the principle of serviced horizontal planes that run in vertical direction (instead of the usual horizontal ground surface)" (Mendis, 1995)

Thereby, instead of purchasing a standard factor-made housing unit with a fixed floor area, the occupant is given a set of choices to buy a multiple of spatial units, to suit his specific requirements.

## 2. "Unfinished" designs

Upto now the architect-professional has played the determining role in designing. Therefore such designs which the architect wish to people to enjoy, have been "imposed" on to the occupants.



But it has been felt that there should be provision, where the occupant, the one who is going to "dwell" in there for his life time, to give a finishing touch or to bring some of his personal expressions into reality.

Therefore the architect and the other professionals have to come down to behold the reality, to feel the pulses of common man in a more realistic manner.

He has to acknowledge the right of the occupant to design/create his own place.

In the past, the people used to make their own house guided by their own intuition and simple tradition. But with the complexity of lives, that task has become an activity, in which the professional involvement is needed. Therefore, as the people do not have the necessary training and knowledge, professional involvement has become needed.

The real challenge is, however, to determine the way this professional hand should be extended. Here, the architect has to play the enablers role; that is to give design solutions in such a manner that overtime they will grow into personalized places of living, in the tenderly hand of the occupants themselves.

### 3. Professional training/new education/new thinking

From the former studies which have been done on mass housing schemes it has been found that the user has not been properly identified and therefore he has not been placed in his due place. The phenomenon has further been strengthened by this study, which has been done considering another important aspect that has been neglected so long.

As revealed by the study on almost all occasions the contemporary architect does not have a deep knowledge on the current trends on the socio-economic and cultural spheres specially of the common man.

Therefore the system of professional training should be strengthened covering this most important aspect and the professionals should be exposed to more rationalized thinking along new paths. New thinking has to be fed to the professionals during their training itself.

Finally it is hoped that this study would provide the initial push for the architect and the other professionals to achieve a more realistic and user-friendly approach to mass housing. Equally or more importantly such an effort would make the common man aware of the importance of the proper creation of his place of living and his due right to gain such an end.



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## DATA COLLECTION

Economic Activity	Total	Male	Female	Both	Male	Female	Both
<b>1. <u>Service activities</u></b>							
<b>a. <u>Professional Services</u></b>							
1. Tution classes	8	5	1	2	62.5	12.5	25
2. Computer training	4	4	-	-	100	-	-
3. Lawyers offices	4	3	1	-	75	25	-
4. Surveyors offices	3	3	-	-	100	-	-
5. Doctors clinics	1	1	-	-	100	-	-
6. Architects offices	1	1	-	-	100	-	-
	21	17	2	2	81%	9.5%	9.5%
<b>b. <u>Specialised Services</u></b>							
1. Medical tests	1	-	1	-	-	100	-
2. Cookery classes	4	-	4	-	-	100	-
3. Electronic eq. rep.	3	3	-	-	100	-	-
4. Beauty saloons	3	-	3	-	-	100	-
5. Dancing classes	2	-	2	-	-	100	-
6. Bridal dressing	3	-	3	-	-	100	-
7. Book binding	1	-	-	-	100	-	-
8. Welding	2	2	-	-	100	-	-
9. Cake and other foods	7	7	-	-	-	100	-
10. Drafting	1	1	-	-	100	-	-
11. Typing	2	-	2	-	-	100	-
12. Fabric painting cla.	2	-	2	-	-	100	-
13. Costume jewellery "	1	-	1	-	-	100	-
14. Bridal dressing "	2	-	2	-	-	100	-
15. Beauty culture "	2	-	2	-	-	100	-
16. Natural flower arra.	1	-	1	-	-	100	-
17. Artificial flower making, soft tops	2	-	2	-	-	100	-
18. Tailoring orders	2	2	-	-	100	-	-
19. Seweing orders	13	-	13	-	-	100	-
20. Dress making classes	2	-	2	-	-	100	-
21. Pressing/ironing	2	-	-	2	-	-	100
22. Buckle coating	1	-	-	1	-	-	100
	58	10	40	3	27.6%	69%	5.2%
<b>c. <u>Non-specialised Services</u></b>							
1. Agency post office	1	-	-	1	-	-	-
2. Photo-copy service	2	2	-	-	100	-	-
3. Lunch packets	3	-	3	-	-	-	-
	6	2	3	1	33.3%	50%	16.7%
	85	35	45	6	41.1%	53%	19.6%

Economic Activity	Total	Male	Female	Both	Male	Female	Both
<b>2. Manufacturing</b>							
<b>a. Specialised Services</b>							
1. Garment factories	4			33	4.7	3.2	
2. Handycrafts	3			25	3.5	2.4	
3. Artificial flowers	3			25	3.5	2.4	
4. Soft toys	2			16.6	2.5	1.6	
6. Architects offices	-	12	-	-	14%	9.6%	
<b>b. Non-specialised Services</b>							
1. Sweets making	5			100%			
	-	5	-	-	100%	4%	
	-	-	17	-	-	-	13.6%
<b>3. Trading</b>							
1. Whole-sale clothing/ garment materials				8.7		1.6	
2. Finished garments				30.4		5.6	
3. Shops	5			21.7		4	
4. Show rooms (Indian cloths & accessories, Singapore, Bangkok garments)	3			13		2.4	
5. Cut pieces & other used materials	6			26		4.8	
	-	23	-	100%	Same		18.4%

Economic Activity	No.	No.	No.	%	%	%	
<b>1. <u>Service activities</u></b>							
<b>a. <u>Professional Services</u></b>							
1. Tutition classes	8			38	9	6.4	
2. Computer training	4			19	4.7	3.2	
3. Lawyers offices	4			19	4.7	3.2	
4. Surveyors offices	3			14.3	3.5	2.4	
5. Doctors clinics	1			4.8	1.2	0.8	
6. Architects offices	1			4.8	1.2	0.8	
	-	21	-	-	24.7%	16.8%	
<b>b. <u>Specialised Services</u></b>							
1. Medical tests	1			1.7	1.2	0.8	
2. Cookery classes	4			6.9	4.7	3.2	
3. Electronic eq. rep.	3			5.1	3.5	2.4	
4. Beauty saloons	3			5.1	3.5	2.4	
5. Dancing classes	2			3.4	2.5	1.6	
6. Bridal dressing	3			5.1	3.5	2.4	
7. Book binding	1			1.7	1.2	0.8	
8. Welding	2			3.4	3.5	1.6	
9. Cake and other foods	7			1.2	8.2	5.6	
10. Drafting	1			1.7	1.2	0.8	
11. Typing	2			3.4	2.5	1.6	
12. Fabric painting class	2			3.4	2.5	1.6	
13. Costume jewellery "	1			1.7	1.2	0.8	
14. Bridal dressing "	2			3.4	2.5	1.6	
15. Beauty culture "	2			3.4	2.5	1.6	
16. Natural flower arra.	1			1.7	1.2	0.8	
17. Artificial flower making, soft tops	2			3.4	2.5	1.6	
18. Tailoring orders	2			3.4	2.5	1.6	
19. Seweing orders	13			22.4	15.3	10.4	
20. Dress making classes	2			3.4	2.5	1.6	
21. Pressing/ironing	2			3.4	2.5	1.6	
22. Buckle coating	1			1.7	1.2	0.8	
	58			-	68%	46.4%	
<b>c. <u>Non-specialised Services</u></b>							
1. Agency post office	1			16	-		
2. Photo-copy service	2			33	100		
3. Lunch packets	3			50	-		
	-	6	-	-	7%	48%	
	-	-	85	-			68%

Economic Activity	Total	Male	Female	Both	Male	Female	Both
<b>2. Manufacturing</b>							
<b>a. Specialised Services</b>							
1. Garment factories	4	-	1	3	-	25	75
2. Handycrafts	3	2	1	-	66	33	-
3. Artificial flowers	3	-	3	-	-	100	-
4. Soft toys	2	-	2	-	-	100	-
6. Architects offices	12	2	7	3	16.7%	58.3%	25%
	21	17	2	2	81%	9.5%	9.5%
<b>b. Non-specialised Services</b>							
1. Sweets making	5	-	3	2	-	60%	40%
	17	4	10	5	23.5%	58.8%	29.4%
<b>3. Trading</b>							
1. Whole-sale clothing/ garment materials	2	2	-	-	-	-	-
2. Finished garments	7	-	3	5	-	42.9	71.4
3. Shops	5	2	1	2	40	20	40
4. Show rooms (Indian cloths & accessories, Singapore, Bangkok garments)	3	1	2	-	33.3	66.9	-
5. Cut pieces & other used materials	6	-	3	3	-	50%	50%
	23	5	9	10	21.8	39.1	43.5

### Distribution of Respondent by Sex and Type of HBEA

Sex (Dominance) (Ownership/Main holder)	Trade %	Service %	Manu. %	Total %
Male	21.8	41.1	23.5	35.2
Female	39.1	53	58.8	51.2
Both	43.5	19.6	29.4	16.8



## Questionnaire of Home-Based Enterprises

### A. General

1. Location
  - a. Scheme:
  - b. Type and number of the house
2. Kind of activity
3. Type of home-based enterprises
  - a. Trade
  - b. Service
  - c. Manufacture
4. Proximity to the entrance

### B. Physical/spatial setting

1. How long have you been in this HBEA?
2. How long have you lived in this house?
3. What is the present status of your house?
  - a. Owned house
  - b. Rental house
  - c. Other
4. Size
  - a. Housing
  - b. Land
5. How much area for business inside the house?
6. How much area for business outside the house?
7. How much area that is used as living area?
8. Condition of building refer to the evaluation/judgement by surveyors?

9.

Components	Evaluation		
	Good	Fair	Bad
a. Cleanness b. Health c. Convenience d. Lighting e. Air Circulation f. Smell g. Noise			

10. Is there any houses changes since the beginning of your business until now?

- a. No, reason
- b. Yes, reason

11. If there any changes, what kind of them?

- a. Maintenance
- b. Doors and windows improvement for business
- c. Business room addition
- d. Bedroom addition
- e. Total construction for business
- f. Make partition for business
- g. Other

12. Does your business have a good prospect?

- a. No, reason
- b. Yes, reason

13. If your business is growing well, will you still stay here?

- a. Yes, reason
- b. No, reason


15. If no, which ideal place for this business?

- a. Location
- b. Reason

16. Mark the position of working space in general layout below.

17. Why did you choose that position?

C. Economic Characteristics

18. Does the head of family have formal occupation?
  - a. No
  - b. Yes, mention
19. How much monthly income does the head of family receive?
20. How much the net income of this business in overage?
21. How much initial investment did you take for starting this business?
22. What was initial investment user for?
23. What sources of that fund?
  - a. Owned saving
  - b. Bank loan
  - c. Money lender
  - d. Loan from the family
  - e. Parent/family gift
  - f. Selling property
  - g. Other
24. Will this business be developed in the future?
25. If yes, what source of fund will you take?
26. Business expenditure
  - a. Raw material
  - b. Major/main equipment (eg. machine)
  - c. Employee fee
  - d. Employee bonus
  - e. Retribution/tax
  - f. Others
27. Family expenditure

D. Labour Force and Social Characteristics

28. How many occupants members do you have in this house?
29. Based on your observation, where are your consumers from?
30. How many customers do you have in average

31. Is there any complaints from your neighbours?

- a. No
- b. Yes, Why?

32. Have government ever prohibited your business?

E. Aspiration

33. What are your problems during conducting of this business?

34. What are your future plans?

F. Priority

35. a. This business was established due to economic phenomenon
- b. This business was established due to killing the time
- c. This business was established due to having skill
- d. This business was established due to the availability of many similar business in this area/neighbourhood

